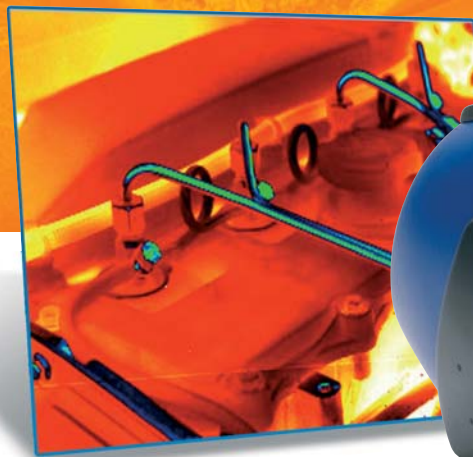


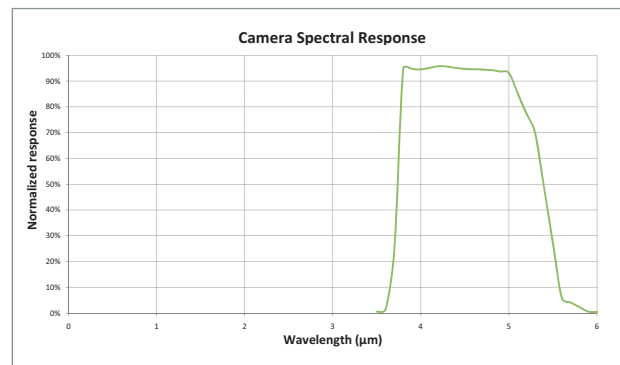


SC5000 SERIES

Complete Range of high performance,
ultra fast & large format infrared cameras
for Industrial, Educational, R&D
& Thermography applications



- > High sensitivity InSb focal plane array
- > Uses fast high linearity ROIC
- > Ultra high sensitivity typical 20 mK
- > 320x256 or 640x512 format / 14 bits dynamic range
- > 3-5 μm spectral range
- > 380 Hz maximum frame rate in full format
- > Smart trigger and advanced capabilities
- > Full radiometric capabilities
- > Motorized filter wheel and focus control
- > Plug & Play interface with GigE / CAMLINK



The SC5000 Series is the most advanced IR cooled camera featuring ultra fast frame rate and high sensitivity



- 1 Heat dissipation by conduction only, no fan = no dust inside
- 2 Temperature sensors for precise radiometric measurements
- 3 Smart trigger input ultra low jitter
- 4 High quality S-Video
- 5 GigE or Camlink interface transfer digital video at the faster frame rate
- 6 High performance InSb FPA
- 7 Long life durability cooler >8 000 hours MTBF
- 8 Rugged cast aluminium housing
- 9 Removable filter wheel
- 10 Build in lens motorized auto-focus

The SC5000 Series is specifically designed for the most demanding users of IR technology, who want to perform thermal imagery at high spatial resolution with the highest sensitivity and accuracy at an affordable cost.

Ultra high frame rate obtained from the latest ROIC technology

Our 320x240 or 640x512 pixels format InSb focal plane array delivers respectively an outstanding 100 or 380 Hz frame rate while keeping extraordinary linearity and sensitivity figures. The use of our latest read out integrated circuit technology provides low noise and high pixel rate without compromising sensitivity.

Frame rate, sub arrays windowing mode and smart trigger and advanced capabilities

The frame rate is programmable from 1 Hz to 100 Hz in full frame format. Sub array windowing modes are user friendly and flexible. Integration time is adjustable in 1 μ s increments. The smart external triggering feature allows synchronization of the image capture to the most fleeting of events.

Plug & Play interfaces

The SC5000 Series is truly plug & play using either GigE or CAMLINK interfaces to transmit both commands and full dynamic range digital video. Using the CAMLINK interface gives access to third party off the shelf frame grabber cards.

Technical specifications

Feature List for SC5000 Series*

Sensor type	InSb
Waveband	2.5 - 5 μ m
Pixel resolution	320 x 256 or 640 x 512 available / 14 bits
Pitch	30 μ m / 15 μ m
NETD	< 18 mK
Cooler	Integrated stirling cooler
Max Full Frame rate	Up to 380 Hz (up to 30 KHz with reduced image size)
Integration time	1 μ s to 20 ms variable by 1 μ s step
Optical interface	Built in 27mm lens with bayonet mount for optional lenses
Field of view	From 44°x36° (12 mm) to 5.5°x4.4° (100 mm) X3 microscope lens
Filter wheel	Wheel 4 slots motorized removable
Digital output	GigE / CAMLINK
Trigger input	Smart trigger capabilities Pre & post trigger features Ultra low jitter LVTTTL signal
Temperature calibration range	Available from -20 °C to up to 3000 °C
Temperature measurement accuracy	± 1 °C or ± 1 %
Extended dynamic range	Multi IT™
*Best specifications	
Integrated features : 3 external analogues signals, Lockin processing, Hypercal™, CNUC™	

Physical specifications

Size (LxWxH)	320 x 141 x 159 mm
Weight	3.8 kg
Operational temperature	-20 °C to +55 °C
Shock	Operational 25 G, IEC 68-2-29
Vibration	Operational 2 G, IEC 68-2-26
Power supply	12 VDC
Power consumption (cooldown / stab)	30 W / 25 W

Optional lenses – Bayonet mount

Focal Lens	FoV (°x°)	Minimal focus distance (mm)	Field of view @ minimal focus distance (mm)
W/O additional lens	20° x 16°	160	52 x 42
12 mm	42° x 34°	140	139 x 111
54 mm	10° x 8°	525	112 x 90

Lens	Magnification	Object distance (mm)	Field (mm)
G1	X1	17	9.6 x 7.2
G0.5	X0.5	46	19.2 x 14.4

SC5000 Series provides a wide range of configurations. Please contact your local FLIR office to define the best configuration for your application.



FLIR Systems AB - World Wide Thermography Center
 Rinkebyvägen 19 - PO Box 3
 SE-182 11 Danderyd - Sweden
 Tel.: +46 (0)8 753 25 00 - Fax: +46 (0)8 755 07 52
 e-mail: sales@flir.se

FLIR Systems Sarl • France • Tel.: +33 (0)1 41 33 97 97 • e-mail: info@flir.fr

FLIR Systems AB • Belgium • Tel.: +32 (0)3 287 87 10 • e-mail: info@flir.be

FLIR Systems Co. Ltd. • Hong Kong • Tel.: +852 27 92 89 55 • e-mail: flir@flir.com.hk

FLIR Systems GmbH • Germany • Tel.: +49 (0)69 95 00 900 • e-mail: info@flir.de

FLIR Systems Ltd. • United Kingdom • Tel.: +44 (0)1732 220 011 • e-mail: sales@flir.uk.com

FLIR Systems S.r.l. • Italy • Tel.: +39 02 99 45 10 01 • e-mail: info@flir.it

www.cedip-infrared.com